

Class 141 FLUENT MATERIAL HANDLING, WITH RECEIVER OR RECEIVER COACTING MEANS

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1 PROCESSES

- 1.1 . Battery grid pasting
- 2 . Filling dispensers
- 3 .. Aerosol or gas-charged type
- 4 .. Gas or variation of gaseous condition in receiver
- 5 .. With filling with fluent non-gaseous materials
- 6 ... Counter-pressure type
- 7 ... With evacuation of container
- 8 ... Vacuum
- 9 . Plural materials
- 10 . Bag filling
- 11 . With material treatment
- 12 .. Compacting

13 MODIFICATION OF FILLING CYCLE IN STARTING AND STOPPING

14 SIPHON BOTTLE CHARGING ARRANGEMENTS

- 15 . For receiver with diverse filling opening
- 16 . With plural heads, stations or materials
- 17 . With gas capsule supporting or manipulating means

18 FILLING OR REFILLING OF DISPENSERS

- 19 . With cutter or punch for gas pressure cartridge
- 20 . Aerosols
- 20.5 . Coating-implement-type receiver
- 21 . By operation of means causing or controlling dispensing
- 22 .. Removable dispenser is supply container closure
- 23 ... Expansible chamber dispenser
- 24 Resilient wall
- 25 ... Expansible chamber of fluid pressure applying or controlling means
- 26 ... Dispenser carried expansible chamber pump
- 27 ... Container with follower
- 28 ... Container mounted jet pump
- 29 . Closure type with manually controlled vent

31 CAPILLARY TYPE

32 BATTERY GRID PASTING

- 33 . Separate sources applied to opposite sides

34 CENTRIFUGAL FILLING

35 PLURAL CONNECTED RECEIVERS FILLED BY SERIAL FLOW

- 36 . Succeeding receiver advanced to filling position

37 DIVERSE FLUID CONTAINING PRESSURE FILLING SYSTEMS INVOLVING RECEIVER GAS CONTENT MODIFICATION

- 38 . Tire inflation
- 39 . Filling means controlled by gas condition in receiver
- 40 .. Control by level in filled receiver
- 41 ... Air pump external to flow line
- 42 Float controlled vacuum line cut-off
- 43 Vacuum line vented to atmosphere

- 44 . Gas and other material separating passage or chamber
- 45 .. Material returned to supply
- 46 . System fluid used in seal or in valve or lift operation
- 47 . Gas control or supply varied, shifted or supplemented during cycle
- 48 .. Gas cycle for pre-treatment of receiver or contents material
- 49 .. Plural or diverse gassing and/or filling cycles
- 50 .. Shifted to vent or fill pipe
- 51 . Gas condition control in housing for receiver
- 52 . With separate storage of gas displaced from receiver
- 53 .. With receiver vent to measuring trap
- 54 . With plural diverse passages for gas to receiver or head
- 55 .. Vent to drain fill pipe
- 56 .. Three or more
- 57 .. Receiver vented to atmosphere before separation (e.g., snift)
- 58 ... Constant bleed
- 59 . Filling with exhausting the receiver
- 60 .. Receiver coupling comprises movable pump element
- 61 .. Vacuum cut-off before filling
- 62 . With lateral travel of registering head and receiver
- 63 . Gas treatment
- 64 .. Of filled receiver

EVACUATION APPARATUS

- 65 . With filling with gas

FLUENT CHARGE IMPELLED OR FLUID CURRENT CONVEYED INTO RECEIVER

- 66 . Valve bag type
- 67 WITH MATERIAL TREATMENT**
- 68 . With fluid contact (e.g., jetting)
- 69 .. Compacting
- 70 .. Agitation of head and receiver
- 71 .. Compacting material in receiver
- 72 ... Agitation
- 73 Of suspended receiver
- 74 Valve bag chair
- 75 With distortion of or impact on receiver side walls
- 76 Agitating means associated with receiver conveyer
- 77 Rotary conveyer
- 78 ... In filled receiver
- 79 ... With contraction of trap to form charge
- 80 .. Heating or cooling

81 WITH TESTING OR WEIGHING RECEIVER CONTENT**82 CONVERTIBLE****83 WITH SOIL REMOVING, COATING, LUBRICATING, STERILIZING AND/OR****84 DRYING**

- 85 . Drip collection
- 86 .. Collector shiftable to non-use position
- 87 .. Collector associated with receiver support
- 88 .. With cleaning, coating or drying means
- 89 .. Nozzle cleaner
- 90 .. Treatment by fluids
- 91 ... Pre-treatment of receiver
- 92 .. Suction hoods and off-takes

93 WITH SIGNAL, INDICATOR, RECORDER, INSPECTION MEANS OR EXHIBITOR

- 94 . Level or pressure in receiver
- 95 .. Hose nozzle or faucet mounted

96 WITH GUARD OR SCREEN FOR OPERATOR**97 COMBINED****98 PLURAL DIVERSE FILLING LINES****99 PLURAL MATERIALS, MATERIAL SUPPLIES OR CHARGES IN A RECEIVER**

- 101 . Lateral travel of registering head and receiver
- 102 . Plural charges from the same source
- 103 . Separate stations for a single receiver
- 104 . Selectively utilized sources
- 105 . With common discharge
- 106 .. Dumping or draining
- 107 .. With mingling in or successive path through trap

SCOOP TYPE FILLER WITH ASSOCIATED RECEIVER

- 108 . Receiver within scoop or inserter

ABSORPTION AND/OR IMMERSION

- 109 . With handling means for receiver
- 110 . Receiver secured to supply closure

RECEIVER FILLED THROUGH BOTTOM OR WHILE INVERTED**WITH MANIPULATION OF FLEXIBLE OR COLLAPSIBLE RECEIVER OR SUPPLY
DRIP PREVENTION BY FLOW REVERSING AND/OR OVERFILL REMOVAL**

- 111 . By means reversing direction of flow
- 112 .. Expanding chamber in disengaged head
- 113 .. By tilting receiver and adjoined filler
- 114 .. Interconnected supply valve cut-off and vacuum control
- 115 .. Siphonic return to supply
- 116 . Separate removal station
- 117 .. With subsequent filling
- 118 .. Combined displacement receptacle and vacuum means
- 119 .. Receiver tilting or inverting means
- 120 .. Wiping, scraping or spatulating means (e.g., trimming)
- 121 .. Simultaneous filling and removing
- 122 .. Double acting or plural pumps

DRIBBLE OR REDUCED FLOW AT END OF CYCLE**WITH CONVEYING MEANS TO SUPPLY SUCCESSIVE RECEIVERS**

- 123 . Sampler type
- 124 . Continuous flow type
- 125 .. Receivers with overlapping flanges or apertured shields
- 126 .. Receiver carrier forms moving support for supply
- 127 .. With spaced receivers and redirected flow
- 128 .. With lateral motion of registering head and receiver
- 129 .. Bodily lifted or swinging siphon filling means
- 130 .. Laterally reciprocating head or trap
- 131 .. Interrupted or irregular cycle
- 132 ... Automatic control by contents material
- 133 ... No can - no fill
- 134 Power control by receiver
- 135 Cam track switching
- 136 Vertical axis trigger
- 137 ... Rotary set of heads
- 138 ... Common vertical axis for conveyer
- 139 With vertically reciprocating plunger or valve piston for each head
- 140 With cam or abutment operated valve or head
- 141 With lift means for receiver
- 142 With additional cushion or yielding lift
- 143 Cam lift or lowered movement
- 144 Manually placed receivers
- 145 Adjustable to receiver size
- 146 . Automatic control of filling cycle by contents material
- 147 . Receiver with asymmetrical or flap closed inlet
- 148 . Safety-stop or non-operating interlock between supply and conveyors
- 149 . Fill triggered by receiver
- 150 .. Individual receiver controls the filling cycle therefor
- 151 ... Charge-forming prevention or charge disposal

- 159 ... Power control by receiver
- 160 Servo-system
- 161 Clutch control
- 162 ... Power derived from lateral motion of receiver
- 163 .. Horizontal axis conveyer
- 164 . Receiver supported on side during filling
- 165 . With relatively movable receiver grip or centering means
- 166 .. Bag type receiver
- 167 . With variable rate of receiver travel in cycle
- 168 . Conveyer with additional receiver conveying or manipulating means
- 169 .. Plural receiver lines to or from single
- 170 .. Lateral shift at filling station between parallel receiver paths
- 171 .. With change in receiver orientation
- 172 .. With lifting or lowering means for receiver for filling
- 173 .. With receiver dispenser
- 174 ... Cup-type dispenser
- 175 ... Reciprocating discharge means and receiver guideway
- 176 .. Conveyer with relatively movable receiver discharge means
- 177 . Nozzle, guide or conveyer adjustable to receiver size
- 178 . Successive groups or non-sequential filling of a receiver series
- 179 .. From a single uniform line of receivers
- 180 . Continuously moving conveyer with receiver stop
- 181 . With head, manifold or supply lowering means
- 182 .. Separate movable or removable sleeve or funnel supply terminal
- 183 . With interconnected contents discharge means
- 184 .. With predetermined number of cycles
- 185 ... Single group filled by rows
- 186 .. Plural lines
- 187 .. With contents gripping or penetrating discharge means
- 188 .. With valve period adjustment
- 189 .. By contact with conveyer projection
- 190 .. Ratchet drive for conveyer
- 191 .. Cam and gear drives
- 192 AUTOMATIC CONTROL OF FLOW CUTOFF OR DIVERSION**
- 193 . Responsive to relative recession of supply means and receiver engaging means
- 194 .. Ejection or release of filled receiver
- 195 .. Discharge assistant control by filled receiver
- 196 . Control by test receiver or chamber or by filled preceding receiver
- 197 . In gas filled receivers
- 198 . Level or overflow responsive
- 199 .. Funnel type closed by float
- 200 ... Valve latched in open position
- 201 ... Normally open with closed position holding means
- 202 ... Plural series valves
- 203 ... Valve stem accessible at top of funnel
- 204 Single valve and float stem
- 205 Pivoted valve
- 206 ... Manually initiated valve with both manual and level cut-off controls
- 207 ... With receiver positioned interlock
- 208 ... With nozzle dislodgment valve trip means
- 209 ... Manual control disable or disconnect
- 210 ... Separate controls for plural series liquid flow line valves
- 211 Self-opening valve
- 212 Float initiates closing control
- 213 Float arm operated valve
- 214 Pressure initiated closing control
- 215 Liquid back pressure completes closing
- 216 Float operated valve

- 217 ... Diverse controls for single valve
- 218 Valve latched open
- 219 Electromagnetic trip
- 220 Float controlled trip means
- 221 With sensitivity or level adjustment
- 222 Adjustable receiver engaging or coacting means
- 223 With spring means biasing valve to close
- 224 Reciprocating valve
- 225 Air displacement trip means
- 226 By response to receiver pressure increase
- .. External initiator as second diverse control
- 228 ... Series flow line valves
- 229 Float control cut-off

**WITH SIPHON FLOW CONTROL BY EQUALIZED LEVELS
PORTABLE SYSTEMS OR TRACK MOUNTED SUPPLY MEANS**

- . Track mounted
- .. Track on receiver supporting means
- PLURAL FILLING MEANS**
- . Adjustable lateral spacing of heads or receivers
- . Diverse flow manifold
- . For plural receivers simultaneously filled
- .. Supply apportioned prior to delivery
- ... Tilting tray or trough means
- ... Grid or cellular insert type divider
- ... Inverted for discharge to receivers
- .. With discharge means
- ... With means for selective operation
- ... Manifold or divider
- Displacement type
- .. With receiver ejecting and/or accommodating means
- . Aids to manual filling
- . Alternating

**WITH CHARGE FORMING MEANS CONTRACTING TRANSVERSELY TO FLOW
PATH**

**WITH MEANS TO MOVE SUPPLY MEANS AND/OR RECEIVER TO, FROM OR
DURING FLOW RELATION**

- . Relatively receding discharge assistant and receiver engaging means
- .. With external form for receiver
- .. With lift or power drive for receiver support
- .. Receiver support bias varied with position of support
- .. With feeder and additional flow modifier or retarder at foot of fill tube
- .. Continuous feeding during filling (e.g., rotary auger)
- ... Receding receiver support or engaging means
- .. Axially reciprocating discharge assistant
- ... Rotatable reciprocating discharge assistant
- ... Reciprocating filling tube type discharge assistant
- ... With synchronized intermittent supply (e.g., check valve)
- ... With receding receiver support
- . Relatively receding filling tube and receiver engaging means
- .. With flow stop or severer at foot of fill tube
- . With means to separate filled receiver and internal form
- . With adjustable movable component
- . Unitary receiver support and flow controller
- .. Rotary or oscillating
- . With clamp for receiver interconnected with movable head or lift
- . Both supply means and receiver support having movement
- . Swinging support for receiver
- .. Tilting type support for separating receiver from filling head

- 273 .. Inversion of receiver
- 274 ... Receiver with gravity operated valve
- 275 . Receiver lift or lower for filling
- 276 .. With interconnected external means to control discharge
- 277 .. Fluid operated lift
- 278 .. Yielding lift
- 279 . With movable support for hose connected head or supply
- 280 . Scraping or leveling by lateral relative movement of supply means and receiver
- 281 . With means for manipulating a filled receiver for separation from head or support
- 282 .. From an external form
- 283 . With movement of receiver in horizontal plane
- 284 . Movable mounted supply
- 285 MULTIPLE PASSAGE FILLING MEANS FOR DIVERSE MATERIALS OR FLOWS**
- 286 . With baffle, spreader, displacer, drip ring, filter or screen
- 287 . With gas expanded seal
- 288 . Adjustable outlet element controls level
- 289 . Vent laterally shiftable
- 290 . With flue or vent externally returning to supply
- 291 . With valve operated by receiver engaging means
- 292 .. Valve operator interconnected with receiver inlet engaging means
- 293 ... Plural valves operated
- 294 With mechanical or lost motion connection
- 295 ... Concentric open vent
- 296 ... Biased coaxial valve stem and nozzle
- 297 . Funnel type
- 298 .. Concentric vent forms valve stem
- 299 .. Concentric external vent
- 300 .. Vent extends along wall to top
- 301 . With valve
- 302 .. Plural valved passages
- 303 ... Float operated vent cut-off
- 304 ... Swingable nozzle operated liquid supply valve
- 305 ... Rigidly interconnected or integral valves
- 306 ... Gravity seated inversion opened valve
- 307 ... With trap or chamber in vent passage
- 308 ... Air vent to supply cut-off by liquid in receiver
- 309 . With air inlet to liquid supply
- 310 . Passage formed by head and receiver spacing means

FILLING MEANS WITH RECEIVER OR RECEIVER COACTING MEANS

- 311R
- 312 . Extensible or expandible inserted coupler or centering means for receiver
- 313 . Flexible or collapsible receiver
- 314 .. With bag or liner securing means
- 315 ... Valve bag clamp and/or chair
- 316 ... With inserted or external form for bag
- 317 ... With flow controlling means
- 318 . Filling by retracting receiver or cartridge
- 319 . Manually coupled and inverted
- 320 .. With discharge assistant, trap or valve
- 321 ... Receiver operated supply discharge means or controller
- 322 ... Combined supply closure and trap
- 323 . Siphon type
- 324 . Continuous flow or overflow type supply
- 325 . Receiver with plural compartments or openings (e.g., vents)
- 326 .. With means to cap or close an opening
- 327 ... Receiver open at both ends
- 328 . Filling means or support provides handle for receiver
- 329 . With puncturing connecting means

- 330 .. Mounted on receiver
- 331 . Funnel type
- 332 .. With connector, guide or support for separable supply
- 333 .. Supply or flow path not concentric with receiver inlet
- 334 ... Laterally extending spout
- 335 .. Valves open when funnel rests on receiver
- 336 .. Valve closed by lifting on funnel handle
- 337 .. Flexible, collapsible or folding
- 338 ... Stored in or on receiver
- 339 .. Anti-swirl, anti-splash, cover or shield
- 340 .. With additional support
- 341 ... With nonsystem support
- 342 Nonuse
- 343 Supported on supply container
- 344 .. With valve actuator or extended stem
- 345 ... Relatively movable
- 346 . Interlocked discharge means, support and/or coupling
- 347 .. With coupling means responsive to material flow
- 348 . Supply means carried receiver flow control opening means
- 349 .. Coupling controls receiver inlet flow
- 350 ... For inlet with externally engaged flap or closure member
- 351 . Receiver actuated discharge means
- 352 .. Movable supply or head
- 353 .. Receiver coupling telescopes flow path elements
- 354 ... Mechanical or lost motion connection
- 355 ... Connection external to tube or tube sections
- 356 ... Control by contact at bottom of receiver
- 357 .. Receiver applied to plunger-type follower
- 358 .. Scoop or drawer type
- 359 .. Receiver weight operated discharge means
- 360 .. Actuator juxtaposed outlet
- 361 ... Servo-system
- 362 ... Relatively movable actuator
- 363 . Filling supply supported by receiver
- 364 .. Dumping or draining type
- 365 .. Material guide
- 366 ... Supply container hand manipulated
- 367 . Adjustable contact area or plural interchangeable or selectively usable coupling means or flow paths
- 368 . Adjustable gauge collar, displacement member or seal
- 369 . With receiver support, guide means, or shield
- 370 .. Guide or shield
- 371 ... Reciprocating guard or guide
- 372 ... Receiver neck or inlet rim engaging support
- 373 ... For movement of receiver laterally of supply outlet
- 374 .. Fill tube extending to or near bottom of receiver
- 375 .. With support for removable supply container
- 376 .. With adjustable support for supply
- 377 .. Receiver swingably supported or supported by bail
- 378 .. Plural interchangeable or selective or adjustable support for receiver
- 379 .. Nonuse position or cover
- 380 ... Receiver supported by supply container
- 381 Closure type
- 382 . Flexible hose terminal with receiver engaging means
- 383 . With receiver and supply securing means
- 384 .. Rotatable collar or sleeve
- 385 .. Telescoping jaws
- 386 .. Fixed flange on supply means for engagement of receiver

- 311A . Drip prevention
- 387 **FILLING HEAD SHIFTABLY OR SEPARABLY CONNECTED TO SUPPLY**
- 388 . Flexible or collapsible coupling section
- 389 .. Hand-held head
- 390 **INSERTED OR EXTERNAL FORM OR PROTECTOR**
- 391 **MATERIAL GUIDES OR SUPPLY WITH RECEIVER SUPPORTS (I.E., AIDS TO
MANUAL FILLING)**
- 392 **MISCELLANEOUS (E.G., FILLING HEADS)**

FOREIGN ART COLLECTIONS

FOR000 **CLASS-RELATED FOREIGN DOCUMENTS**

DIGESTS

DIG1 **MAGNETIC**DIG2 **FLUIDIC FLOW CONTROL VALVES**

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